PSY64
COST-EFFECTIVENESS ANALYSIS OF PREGABALIN IN THE TREATMENT OF CENTRAL NEUROPATHIC PAIN
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OBJECTIVES: To compare costs and effectiveness of pregabalin compared to placebo in the treatment of central neuropathic pain (CNP) from the perspective of the public healthcare payer in the Czech Republic. **METHODS:** A de novo micro-simulation model was developed in MS Excel comparing pregabalin treatment of CNP versus placebo as there is no other treatment of CNP available and reimbursed in the Czech Republic. The improvement of patients' pain intensity expressed as the decrease in VAS (Visual Analog Scale (0-100) score was modelled during the 24 week time horizon. The changes of VAS score were estimated for each intervention using a regression functions of time and the baseline VAS score. Utilities were assigned to each VAS score according to the regression equations expressing the dependence of utility value on average weekly VAS score of CNP patients. Relevant costs (reflecting payer's perspective) were defined as costs of pharmacotherapies, outpatient care related to drug application, management of treatment, treatment of adverse events and concomitant medication were considered. **RESULTS:** The incremental cost-effectiveness ratio (ICER) of pregabalin compared to placebo reached 8,335.22 EUR per Qualy-adjusted-life-year (QALY) gained. The probability of pregabalin being cost-effective (ICER under willingness to pay 39,876.74 EUR) was 100%. **CONCLUSIONS:** Pregabalin is the only option for the treatment of CNP in the Czech Republic and brings significant pain relief for patients. Treatment with pregabalin also results in low ICER and can be considered a cost-effective treatment of central neuropathic pain in the Czech Republic.

PSY65
COST-EFFECTIVENESS OF USTEKINUMAB IN THE TREATMENT OF PSORIASIS IN FINLAND
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OBJECTIVES: To evaluate the cost-effectiveness of ustekinumab in the treatment of psoriasis in the Finnish setting. **METHODS:** A sequential Markov cohort model was programmed in Excel using Visual Basic for Applications. First, the most frequently used treatment sequence (ustekinumab -> adalimumab -> etanercept -> infliximab -> maintenance, Finnish "current care") was compared to the most used sequence prior to ustekinumab's market authorization (adalimumab -> etenarcept -> infliximab -> maintenance, "past care" in Finland) in a confirmatory analysis setting. Then the incremental cost-effectiveness of all relevant treatment sequences was explored to find out the health economic relevance of current and past care sequences. The primary analysis outcomes were direct payer costs and quality-adjusted life years (QALY) gained. Secondary outcomes included Psoriasis Area and Severity Index (PASI) response years gained and Dermatology Quality of Life Index (DLQI) years avoided. Drugs, follow-up, drug administration, laboratory tests, adverse events and treatment failures as well as direct costs to patient were included as costs at 2014 price level. Initial treatment efficacy was based on a Bayesian network meta-analysis of randomized clinical trials, and treatment persistence was modeled based on recent real world registry studies. All results were discounted with 3% per annum during the 5-year modelling timeframe. **RESULTS:** The total discounted 5-year costs were €74,383 for the current care and €76,847 for the past care sequence. The respective QALYs were 3.895 and 3.825. Thus, the current care using ustekinumab dominated the past care without ustekinumab. PASI and DLQI results were in line with QALY results. Results were robust in the performed sensitivity analyses. Furthermore, in the explorative analysis of all relevant treatment sequences, ustekinumab was always part of the cheapest sequence. **CONCLUSIONS:** Ustekinumab is the most cost-effective treatment in the current Finnish psoriasis treatment practice, and its use is both clinically and health economically relevant.

PSY66
COST-MINIMIZATION ANALYSIS AND TOTAL COST ANALYSIS FOR A WEIGHT RANGE IN CROHN'S DISEASE TREATMENT WITH ANTI-TNF BIOLOGICS UNDER BRAZILIAN PRIVATE HEALTH CARE SYSTEM PERSPECTIVE
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OBJECTIVES: The aim of this study was to describe the total treatment costs related to Crohn's Disease treatment with biologics and to evaluate these costs based on the most prevalent weight range. **METHODS:** A cost-minimization analysis was performed among adalimumab-subcutaneous (ADA) and infliximab-intravenous (IFX) to compare the total treatment costs in Crohn's disease according to the Brazilian Private HealthCare System perspective. Total treatment cost was calculated based on the dose per application, number of vial/syringe, cost of application and median and range of weight. These inputs were based on scientific literature. Yearly treatment cost was calculated for patients with a median of 68kg, according to doses defined in product labels. A cost analysis for a weight range was performed. Drug prices were based on Factory Prices plus 18% taxes (CMED source). An univariate analysis was performed to determine the impact on results. **RESULTS:** The median patient weight used in this analysis was 68±4,08kg (Weight range: 64 to 72kg - normal distribution). For IFX the Medication Cost was R$92.478,12, Application Cost was R$2.360,33 and the Total Treatment Cost was R$94.838,45. For ADA the Medication Cost was R$85.807,15, Application Cost was R$3.788,98 and the Total Treatment Cost was R$89.596,13. Comparing the scenario with IFX and ADA, the treatment with ADA presented a savings of R$5.242,32 per patient/year. The weight interval cost analysis presented a savings for ADA of R$5.242,32 per patient/year in a range of 64 to 72kg. In sensitivity analysis ADA presented economic savings in most scenarios, the variation of IFX vial and ADA syringe costs are important factors that could modify the sensitivity analysis. **CONCLUSIONS:** The treatment of Crohn's disease with ADA compared to IFX presented an economic savings for nearly 68% of patients with Crohn's Disease in the Brazilian Private HealthCare System.

PSY67
COST-EFFECTIVENESS MODELLING FOR NEUROPATHIC PAIN TREATMENTS: AN EXPLORATION TO IDENTIFY COMPARATIVE IMPORTANCE OF MODEL PARAMETERS
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OBJECTIVES: To provide an open-access model and illustrate how this can be used as a first step in the early economic evaluation of emerging neuropathic pain products, enabling the understanding of important parameters in the assessment of therapies. **METHODS:** We closely replicated a model structure created by NICE to inform guideline development in neuropathic pain. The structure was replicated as R code for ease of exposition. Costs were updated to reflect 2014 prices. The exploratory analysis considered a hypothetical drug 'Product X' versus pregabalin, a product used widely in neuropathic pain. The analysis explored the percentage premium over the price of pregabalin that would result in an ICER at the NICE threshold of £20,000 when varying efficacy parameters. **RESULTS:** A 30% improvement over pregabalin in the proportion of patients achieving a 30-49% reduction in pain could justify a price premium of 39%, whilst a 30% improvement in the proportion of patients achieving ≥50% improvement could justify a premium of 170%. If 'Product X' provides no analgesic improvement but causes 30% fewer adverse events and related withdrawals, a premium of 27% could be justified. **CONCLUSIONS:** The analyses presented highlight how this transparent model can be used as a tool for identifying parameters of importance in the early economic evaluation in neuropathic pain. The R code underpinning these analyses is made readily available and we welcome the ISPOR community to use, adapt and provide comments on how to refine and improve this model for future use.

PSY68
COST-UTILITY ANALYSIS OF ADALIMUMAB FOR THE TREATMENT OF MODERATE-TO-SEVERE ULCERATIVE COLITIS IN PATIENTS IN SPAIN
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OBJECTIVES: Treatments for patients with moderate-to-severe ulcerative colitis (UC) include biologic (adalimumab [ADA], infliximab [IFX], and golimumab [GOL]) and non-biologic therapies (anti-inflammatory drugs and immunosuppressants). Non-biologic therapy is standard of care (SOC). We evaluated the cost utility of ADA+SOC vs SOC alone and assessed the total cost difference of ADA+SOC vs IFX+SOC and GOL+SOC for treating moderate-to-severe UC in patients with inadequate response to non-biologic therapy in Spain. **METHODS:** A Markov model was developed to simulate treatment and disease progression for UC patients, which considered 8 health states: 3 pre-surgery (remission, mild, and moderate-to-severe), surgery, and 4 post-surgery (no complication, transient complication, chronic complication, and death). The model assumed no difference in efficacy of biologic therapies. Transitional probabilities of pre-surgery, surgery and post-surgery states were derived from clinical trials of ADA and published literature. Health utility and cost inputs came from literature. Only direct costs were considered in the base case. Results were expressed in costs per quality-adjusted life-year (QALY) gained for ADA+SOC vs SOC alone and total cost differences for ADA+SOC vs IFX+SOC and GOL+SOC. Deterministic and probabilistic sensitivity analyses (DSA, PSA) were performed. **RESULTS:** The incremental costs per QALY gained for ADA+SOC vs SOC alone were €46,815 over a 10-year time horizon (2013 euro). Results from DSA ranged from €33,622 (when indirect costs were considered) to €49,083 (when the utilities of health states were changed). PSA revealed that ADA+SOC was cost-effective in 61% and 84% of the simulations at €50,000/QALY and €60,000/QALY thresholds, respectively. Compared with IFX+SOC and GOL+SOC, ADA+SOC was associated with cost savings of €8,570 and €37,113, respectively. DSA and PSA results showed that ADA+SOC led to cost savings in all scenarios. **CONCLUSIONS:** For UC, the ADA+SOC strategy demonstrated reasonable cost-effectiveness value compared with SOC alone and was cost-saving compared with IFX+SOC and GOL+SOC, in Spain.

PSY69
COST-UTILITY OF BARIATRIC SURGERY IN BELGIUM, DENMARK, AND ITALY
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OBJECTIVES: To evaluate the cost-utility of bariatric surgery in Belgium, Denmark, and Italy from a third-party payer perspective over a 10-year and a lifetime horizon. **METHODS:** A state-transition Markov model was developed, in which patients may experience surgery, post-surgery complications, diabetes mellitus type 2, cardiovascular diseases or die. Transition probabilities, surgery effectiveness and safety, costs, and utilities were informed by the literature, patient registries and administrative databases. Three types of surgeries were considered: gastric bypass, sleeve gastrectomy, and adjustable gastric banding. A base-case analysis was performed for the population of real surgical candidates in all countries. Cost data are presented in 2012 euros for Belgium, Italy and Denmark. **RESULTS:** In Belgium, in the base-case analysis over 10 years bariatric surgery led to incremental cost of €3,261 and generated additional 1.4 quality-adjusted life years (QALYs) with incremental cost-effectiveness ratio of €2,407/QALY. Over lifetime, surgery led to savings of €10,036, and generated additional 1.1 years of life, and 5.0 QALYs. In Denmark, in the base-case analysis over 10 years bariatric surgery led to incremental cost of €2,044 and